second direction, transverse to the first direction, and define a cavity therebetween, bounded by respective opposing sidewalls of the pair of barriers and extending commonly therewith in the first direction, an address electrode being disposed on the first substrate and extending in the first direction:

depositing a phosphor paste within the cavity, the phosphor paste having a content of phosphor in a range of from 10% to 50%, by weight; and

firing the phosphor paste to form the phosphor layer.

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46 (AS ONCE AMENDED HEREIN) A method of forming phosphor layers in an array of discharge cells formed on a first substrate of a plasma display panel of a surface discharge type, the array comprising plural columns, in a first direction, and plural rows, in a second direction transverse to the first direction, of plural unit luminescent areas, each unit luminescent area comprising a respective set of a common number of discharge cells, wherein each discharge cell comprises:

a cavity bounded by respective opposing and spaced sidewalls of a pair of parallel barriers formed on a first substrate, the cavity extending commonly with the pair of barriers in a first direction;

an address electrode on the first substrate and extending in the first direction;

a pair of display electrodes formed in parallel, spaced relationship on a surface of a second substrate covered by an insulating layer and positioned in opposed relationship with the barriers, the pair of display electrodes extending in a second direction, transversely to the barriers and the first direction, and the pair of display electrodes defining an individual display cell within the cavity, the method comprising:

depositing a phosphor paste having a content of phosphor in a range of from 10% to 50%, by weight, on one of the first and second substrates; and

firing the phosphor paste so as to form a phosphor layer in each discharge cell, extending between the respective opposing sidewalls of the barriers.

47. (AS ONCE AMENDED HEREIN) The method as recited in claim 46, further comprising:

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selecting the weight percentage of the phosphor in the paste in accordance with the desired thickness of the phosphor layer, after firing the paste; and

applying the phosphor paste in an amount sufficient to substantially fill each cavity.

50. (ONCE AMENDED) The method as recited in claim 49, wherein the thickening agent is selected from the group consisting of cellulose and acrylic resin thickening agents.

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51. (ONCE AMENDED) The method as recited in claim 49, wherein the organic solvent is selected from the group consisting of alcohol and ester solvents.

Please ADD the following claims:

60. (AS NEW HEREIN) The method as recited in claim 37, wherein the at least a portion of the address electrode is disposed within the bottom of the cavity.

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61. (AS NEW HEREIN) The method as recited in claim 46, wherein the at least a portion of the address electrode is disposed within the bottom of the cavity.

62. (AS NEW HEREIN) The discharge cell as recited in claim 55, wherein the at least a portion of the address electrode is disposed within the bottom of the cavity.

63. (AS NEW HEREIN) A method of forming a phosphor layer in a discharge cell of a surface discharge type plasma display panel, wherein the discharge cell is defined in a cavity bounded by a barrier sidewall, the method comprising:

depositing a phosphor paste within the cavity, the phosphor paste having a content of phosphor in a range of from 10% to 50%, by weight; and

firing the phosphor paste to form the phosphor layer.

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64. (AS NEW HEREIN) The method as recited in claim 63, further comprising:

selecting the weight percentage of the phosphor in the paste in accordance with the desired thickness of the phosphor layer, after firing the paste; and

applying the phosphor paste in an amount sufficient to substantially fill the cavity.

65. (AS NEW HEREIN) The method as recited in claim 64, further comprising:

selecting the content of phosphor in the phosphor paste to be in a range from 10% to 50%, by weight, when the desired thickness of the phosphor layer is selected in a range of from 10 microns to 50 microns, respectively.

66 (AS NEW HEREIN) The method as recited in claim 63, wherein the phosphor paste further comprises a thickening agent and an organic solvent.

67. (AS NEW HEREIN) The method as recited in claim 66, wherein the thickening agent is selected from the group consisting of cellulose and acrylic resin thickening agents.

68. (AS NEW HEREIN) The method as recited in claim 66, wherein the organic solvent is selected from the group consisting of alcohol and ester solvents.

69. (AS NEW HEREIN) The method as recited in claim 63, further comprising:

applying the phosphor paste within the cavity and firing same so as to form the phosphor layer covering a bottom portion of the cavity including the address electrode.

70. (AS NEW HEREIN) The method as recited in claim 63, further comprising:

applying the phosphor paste within the cavity and firing same so as to form the phosphor stripe extending continuously from the bottom of the cavity onto, and covering, the respective opposing sidewalls of the barriers defining the cavity.

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71. (AS NEW HEREIN) The method as recited in claim 70, wherein the phosphor layer is formed on the opposing sidewalls of the adjacent barriers in a height not exceeding a height of the barriers.

72. (AS NEW HEREIN) A method of forming a phosphor layer in a discharge cell of a surface discharge type plasma display panel defined in respective cavities bounded by respective barrier sidewalls, the discharge cells aligned in plural columns in a first direction and plural rows in a second direction transverse to the first direction, plural address electrodes being supported on the first substrate and extending in the first direction in alignment with respective plural discharge cells, comprising:

depositing a phosphor paste within the cavities, the phosphor paste having a content of phosphor in a range of from 10% to 50%, by weight; and

firing the phosphor paste to form respective phosphor layers in the plural cavities.

73. (AS NEW HEREIN) The method as recited in claim 72, further comprising:

selecting the weight percentage of the phosphor in the paste in accordance with the desired thickness of the phosphor layer, after firing the paste; and

applying the phosphor paste in an amount sufficient to substantially fill the cavity.

74. (AS NEW HEREIN) The method as recited in claim 73, further comprising:

selecting the content of phosphor in the phosphor paste to be in a range from 10% to 50%, by weight, when the desired thickness of the phosphor layer is selected in a range of from 10 microns to 50 microns, respectively.

75. (AS NEW HEREIN) The method as recited in claim 72, wherein the phosphor paste further comprises a thickening agent and an organic solvent.

76. (AS NEW HEREIN) The method as recited in claim 75, wherein the thickening agent is selected from the group consisting of cellulose and acrylic resin thickening agents.

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77. (AS NEW HEREIN) The method as recited in claim 75, wherein the organic solvent is selected from the group consisting of alcohol and ester solvents.

78. (AS NEW HEREIN) The method as recited in claim 72, further comprising:

applying the phosphor paste on the first substrate within the cavity and firing same so as to form the phosphor layer covering a bottom portion of the cavity including the address electrode.

79. (AS NEW HEREIN) The method as recited in claim 72, further comprising:

applying the phosphor paste on the first substrate within the cavity and firing same so as to form the phosphor layer extending continuously from the bottom of the cavity onto, and covering, the respective barrier sidewall defining the cavity.

80. (AS NEW HEREIN) The method as recited in claim 79, wherein the phosphor layer is formed on the opposing sidewalls of the adjacent barriers in a height not exceeding a height of the barriers.

81 (AS NEW HEREIN) A method of forming phosphor layers in an array of discharge cells formed on a first substrate of a plasma display panel of a surface discharge type, the array comprising plural columns, in a first direction, and plural rows, in a second direction transverse to the first direction, of plural image elements, each image element comprising a respective set of a common number of discharge cells, wherein each discharge cell comprises:

a cavity bounded a respective cavity sidewall supported by a first substrate;

an address electrode supported by the first substrate and extending in the first direction, a portion thereof being aligned with the cavity;

a pair of display electrodes formed in parallel, spaced relationship on a surface of a second substrate covered by an insulating layer and positioned in opposed relationship with the address electrode, the pair of display electrodes extending in a second direction, transversely to

the first direction defining an individual discharge cell within the cavity, the method comprising:

depositing a phosphor paste having a content of phosphor in a range of from 10% to 50%, by weight, on one of the first and second substrates; and

firing the phosphor paste so as to form a phosphor layer in each discharge cell, extending between the respective opposing sidewalls of the barriers.

82. (AS NEW HEREIN) The method as recited in claim 81, further comprising:

selecting the weight percentage of the phosphor in the paste in accordance with the desired thickness of the phosphor layer, after firing the paste; and

applying the phosphor paste in an amount sufficient to substantially fill each cavity.

83 (AS NEW HEREIN) The method as recited in claim 82, further comprising:

selecting the content of phosphor in the phosphor paste to be in a range from 10% to 50%, by weight, when the desired thickness of the phosphor layer is selected in a range of from 10 microns to 50 microns, respectively.

84 (AS NEW HEREIN) The method as recited in claim 81, wherein the phosphor paste further comprises a thickening agent and an organic solvent.

85. (AS NEW HEREIN) The method as recited in claim 84, wherein the thickening agent is selected from the group consisting of cellulose and acrylic resin thickening agents.

86. (AS NEW HEREIN) The method as recited in claim 84, wherein the organic solvent is selected from the group consisting of alcohol and ester solvents.

87. (AS NEW HEREIN) The method as recited in claim 81, further comprising:

applying the phosphor paste on the first substrate within the cavity and firing same so as to form the phosphor layer covering a bottom portion of the cavity including the address electrode.

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88. (AS NEW HEREIN) The method as recited in claim 81, further comprising:

applying the phosphor paste on the first substrate within the cavity and firing same so as to form the phosphor layer extending continuously from the bottom of the cavity onto, and covering, the respective barrier sidewall defining the cavity.

89. (AS NEW HEREIN) The method as recited in claim 88, wherein the phosphor layer is formed on the opposing sidewalls of the adjacent barriers in a height not exceeding a height of the barriers.

90. (AS NEW HEREIN) The method as recited in claim 72, wherein the portion of the address electrode is disposed within the bottom of the cavity.

91. (AS NEW HEREIN) The method as recited in claim 81, wherein the portion of the address electrode is disposed within the bottom of the cavity.

92. (AS NEW HEREIN) The discharge cell as recited in claim 81, wherein the portion of the address electrode is disposed near the bottom of the cavity.